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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APPEAL BRIEF FOR THE APPELLANT

Ex parte WALLENIUS

CONFIGURATION OF INTELLIGENT NETWORK SERVICE

Serial No. 09/439,187

Appeal No.:

Group Art Unit: 2681

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October 20, 2004

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Appeal Brief (in triplicate)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Appellant:

WALLENIUS

Appeal No.:

Serial Number: 09/439,187

Group Art Unit: 22681

Filed: November 12, 1999

Examiner: Sheila B. Smith

For: CONFIGURATION OF INTELLIGENT NETWORK SERVICE

BRIEF ON APPEAL

October 20, 2004

I. INTRODUCTION

This is an appeal from the rejection set forth in an Official Action dated May 20, 2004, rejecting claims 2-14 as being unpatentable under 35 U.S.C. § 102(b) over certain prior art. Claims 15-17 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims. Nevertheless, Applicant is not appealing the objection of claims 15-17. Claims 2-17 constitute all of the claims pending in this patent application. A Notice of Appeal was timely filed on August 20, 2004. This Appeal Brief is being timely filed.

II. REAL PARTY IN INTEREST

The real parties in interest in this application are Nokia Networks Oy, of Espoo, Finland, by virtue of an Assignment which was submitted for recordation on November 12, 1999, and which was recorded at Reel 010396, Frame 0342, on November 12, 1999.

It is noted that Nokia Networks Oy is wholly owned by Nokia Corporation, also of Finland.

III. STATEMENT OF RELATED APPEALS AND INTERFERENCES

There are no known related appeals and/or interferences which will directly effect or be directly effected by or have a bearing on the Board's decision in this appeal.

IV. STATUS OF CLAIMS

Claims 2-14, all of the claims pending in the present application, are rejected as being unpatentable over certain prior art. Specifically, the rejections of claims 2-14 as being anticipated under 35 U.S.C. 102(b) by European Application EP 0812120 A2 to Ali Vehmas are the subject of this appeal.

V. STATUS OF AMENDMENTS

Claims 6, 7, 10, 11 and 12 were amended in a Preliminary Amendment which was filed on November 12, 1999. Claims 1-14 were amended in a response which was filed on June 26, 2002. Claims 2, 6-7 and 10-14 were amended in a response filed December 31, 2002. The amendment to claims 2, 6-7 and 10-14 were not entered and a Request of Continuing Examination was filed on November 3, 2003. Claim 1 was cancelled and claims 15-17 were added in a response which was filed on April 19, 2004. No further amendments have been made, and no amendments, therefore, are pending.

VI. SUMMARY OF THE INVENTION

The invention relates to configuration of an intelligent network service over a user interface of a mobile station. Figure 1 shows a combination of a mobile communications system and an intelligent network, wherein the functionality of the mobile communications system is extended by means of the intelligent network and the operation of the intelligent network is controlled by a service control point. Col. 5, lines 9-15. Page 2, lines 33 – 35 discloses that when a user subscribes to a service, a routine is loaded in the user's mobile station and execution of the routine presents a corresponding extension of the user interface.

Page 5, line 31-Page 6, line 3 discloses that figure 2 illustrates the configuration of a “reachablity profile” intelligent network service whereby a user transmits, via the mobile station, a configuration information inquiry to the network. According to page 6, lines 4-15, the network recognizes the inquiry message, for example on the basis of special characters included in the message, and forwards the message to the service control point of the intelligent network. Page 6, lines 15-19 discloses that the service control point analyzes the message, detects that the user wishes to change his reachability profile and transmits a second message containing the current configuration information to the mobile station. According to page 6, lines 19-23, upon receipt of the second message, the mobile station activates the configuration routine and the user interface extension intended for configuring the intelligent network service is displayed on the mobile station. Page 7, lines 8-18 discloses that the configuration routine of the user interface enables the user to view and edit the current configuration information, i.e., the

current reachability profile, and thereafter generate a third message which includes changes to the reachability profile.

According to page 7, line 25 - page 8, line 22, figure 3 further illustrates how the configuration of the intelligent network service may take place via an extended user interface of the mobile station. Figure 4 shows a signaling diagram which illustrates the configuration of the intelligent network service via a user interface of the mobile station and is described in detail on page 9, line 19 - page 10, line 26. Page 10, line 32 - page 11, line 2 discloses that figure 5 illustrates that events may be activated at the service control point. Page 11, lines 3-7 discloses that the invention provides the user and operator with an easy and flexible manner of configuring intelligent network service whereby use of radio resource is minimized because the configuration information is completely edited in the mobile station and transmitted to the service control point after editing.

VII. ISSUES

The issues on appeal are whether claims 2-14 are anticipated by European Application EP 0 812 120 A2 to Ali Vehmas. As will be discussed below, this Appeal Brief will show that these rejections should be withdrawn, and this application passed to issue.

VIII. GROUPING OF CLAIMS

Applicants respectfully submit that each of claims 2-14 stands alone. In other words, each of the presently pending claims is separately patentable.

IX. APPELLANT'S ARGUMENTS

Applicants respectfully submit that each of pending claims 2-14 recite subject matter which is neither disclosed nor suggested by Ali Vehmas.

The Office Action stated that claims 2-14 were anticipated under 35 U.S.C. 102(b) by Ali Vehmas. The rejection is traversed as being based on a reference that neither teaches nor suggests all of the features clearly recited in independent claims 2, 13 and 14 and claims 3-12 which are dependent upon claim 2.

Claim 2, upon which claims 3-12 and 15 depend, recites a method of configuring an intelligent network service over a user interface of a mobile station by means of a management application located at an intelligent network node when the mobile station is connected to a mobile communication system which is, in turn, connected to an intelligent network. The mobile station includes an extension layer to support installable routines. The method includes the step of loading a configuration routine of the intelligent network service in question in the mobile station. The method also includes the step of at least one of the extension layer and the configuration routine connected to the mobile station receiving an input to configure the intelligent network service, generating configuration information on the basis of the input and transmitting the configuration information in a configuration message through a network element of the mobile communication system to the intelligent network node. The method further

includes the steps of the intelligent network node interpreting the configuration information included in the configuration message and configuring the intelligent network service. The method also includes the mobile station transmitting a configuration information inquiry before the configuration message.

Claim 13, upon which claim 16 depends, recites a mobile station including an extension layer to support routines to be installed. The mobile station includes a configuration routine of an intelligent network service. The routine is arranged to provide the extension layer with an input to configure the intelligent network service. As a response to the input, the mobile station is arranged to transmit configuration information to a mobile telephone network; and the mobile station is arranged to transmit a configuration information inquiry before the configuration message.

Claim 14, upon which claim 17 is dependent, recites an arrangement for configuring over a user interface of a mobile station an intelligent network service controlled by an intelligent network node when the mobile station includes an extension layer to support installable routines. The mobile station includes a configuration routine of the intelligent network service. The routine is arranged to provide the extension layer with an input to configure the intelligent network service. As a response to the input, the mobile station is arranged to transmit configuration information through a network element of the mobile communication system to the intelligent network node. The intelligent network node is arranged to

interpret the configuration information included in the configuration message and configure the intelligent network service on the basis of the configuration information. The mobile station is also arranged to transmit a configuration information inquiry before the configuration message.

As described below, Ali-Vehmas fails to disclose or suggest the elements of these claims.

Ali-Vehmas is related to a method for efficiently bringing the continuously changing and developing services of an intelligent telecommunication network within reach of private users. Col. 2, lines 32-39. Ali-Vehmas teaches a cellular radio telephone network capable of intelligent network operation. Col. 4, lines 42-44. The telephone network includes a mobile switching center which is connected to a separate intelligent network service control point. Col. 4, line 45-56. Network services may be used with an intelligent card, which may be connected to a mobile station. Col. 5, lines 3-6. The intelligent card is used for programming and updating the user interface of mobile stations. Col. 5, lines 16-19.

Specifically, Ali-Vehmas teaches that a mobile phone which implements the invention includes a display and a keypad with function keys that can be used for various purposes in various situations. Col. 5, lines 23-47. Operation of the mobile phone is controlled by a central processing unit which is connected to an intelligent card reader that communicates with the intelligent card. Col. 5, lines 48-56. When a new service is developed, it is programmed in the storage means of the mobile

switching center and a user who wishes to gain access to the service brings his intelligent card to be programmed, whereby the data that is required to control the mobile phone, as described below, is loaded in the intelligent card. Col. 6, lines 6-24.

Ali-Vehmas further teaches that the mobile phone includes a function wherein a list of all available intelligent network services is shown on the display when a certain key is pressed. Col. 6, line 25-27. Specifically, the central processing unit receives the keystroke as input and responds by reading, from the intelligent card, the character sequences represented the services and then sends them to the display. Col. 6, lines 27-32. When a service is selected, as a response to the keystroke indicating the selection, the central processing unit sends a request to the switching center and the switching center provides the requested information to the mobile phone. Col. 6, lines 33-43. The user of the mobile phone may thereafter use the keys on the mobile phone to browse the list of service and/or select a specific service. Col. 6, line 44-Col. 7, line 11.

Ali-Vehmas clearly does not teach or suggest configuring an intelligent network service as recited in claims 2, 13 and 14. Instead, Ali-Vehmas discloses and is directed to using intelligent network services. Claims 2, 13 and 14, in part, recite that the mobile station transmits a configuration information inquiry before the configuration message. On page 7 of the Office Action, in response to arguments presented by the Applicant that Ali-Vehmas does not teach that the

mobile station transmits a configuration information inquiry before the configuration message as recited in claims 2, 13 and 14, the Office Action cites col. 6, lines 25-27 of Ali-Vehmas as teaching this limitation. However, on page 7, the Office Action states that Ali-Vehmas reads on Applicant's claimed limitation, i.e., a mobile station that transmits an information inquiry. Applicant submits that the Office Action omitted the underlined word – "configuration," which when inserted into the claimed limitation is clearly not taught by Ali-Vehmas. In fact, col. 6, line 25-27 of Ali-Vehmas only teaches that the mobile phone includes a function wherein a list of all available intelligent network services is shown on the display when the user presses a certain key. The cited column of Ali-Vehmas clearly does not teach or even suggest that the mobile station transmits a configuration information inquiry before the configuration message as recited in claims 2, 13 and 14.

The technique of Ali-Vehmas is only directed to using an intelligent network service over a mobile station user interface. See, for example, line 1 of the Abstract of Ali-Vehmas, Column 1, line 1, Column 2, line 50, Column 3, line 38, Column 5, line 3, Column 7, line 26, and other areas of Ali-Vehmas which only refer to using network services. Ali-Vehmas does discuss preparing the intelligent network service for operation, in column 1, lines 21-24. However, the only "preparation" which is discussed in Ali-Vehmas is utilizing switching centers which include a programming facility wherein network operators can alter operation and services. Thus, Applicant respectfully submits that, at best, Ali-Vehmas only

discloses configuration of an intelligent network service via a programming facility in the switching centers. However, no such configuration is disclosed over a user interface of a mobile station, as recited in claims 2, 13 and 14 of the present application.

The preparation of Ali-Vehmas is not at all comparable to the configuration aspect of the present invention, wherein the mobile station transmits configuration information inquiry before the configuration message as recited in claims 2, 13 and 14. As clear from the discussion in the present application, the term "configuration" is substantially synonymous to "customization." Hence, Applicant further submits that, when practicing the claimed invention, it would be apparent to one skilled in the art that an end-user of a mobile communication system according to the claimed invention would not be able to encode software instructions that implement the intelligent network service. Rather, one skilled in the art would understand that, according to the claimed invention, "configuration" involves setting user-settable parameters that control the operation of the service before the service is to be used.

Furthermore, the mobile station of Ali-Vehmas does not "transmit" an inquiry as suggested on page 7 of the Office Action. Col. 6, line 27-32 of Ali-Vehmas clearly teaches that when the central processing unit of the mobile phone receives the keystroke for displaying all available intelligent network service, it reads the services from the intelligent card and sends them to the mobile phone display. All

of the processing described in Col. 6, line 27-32 of Ali-Vehmas occurs in the mobile station. There is no teaching in Ali-Vehmas of the mobile station transmitting an inquiry. Furthermore, the result of the reading in Ali-Vehmas is not configuration information for any intelligent network service but merely a list of all available services.

Claim 2 also recites, in part, loading a configuration routine of the intelligent network service in question in the mobile station. The Office Action states that Ali-Vehmas teaches this limitation in col. 6, lines 22-24. Col. 6, lines 22-24 teaches that data required to control the mobile phone in the manner described below is loaded in the intelligent card and when the user inserts the intelligent card in the mobile phone, new services are available to the user. Ali-Vehmas then describes below how the user may use intelligent services stored in the intelligent card. Applicant submits that Ali-Vehmas does not even discuss configuring an intelligent network services. As such, the “data required to control the mobile phone” according to Ali-Vehmas is data for using rather than configuring an intelligent network service.

Additionally, claim 2, in part, recites the mobile station receives an input to configure the intelligent network service, generates configuration information on the basis of the input and transmits the configuration information in a configuration message through a network element of the mobile communication system to the intelligent network node. Applicant submits that there is simply no discussion or

suggestion in Ali-Vehmas of receiving an input to configure the intelligent network service, generating configuration information on the basis of the input and transmitting the configuration information in a configuration message to the intelligent network node by the mobile station as recited in claim 2. Moreover, claims 2 and 14, in part, recite that the intelligent network node interprets the configuration information included in the configuration message and configures the intelligent network service. There is simply no discussion or suggestion in Ali-Vehmas of the intelligent network node interpreting the configuration information included in the configuration message and configuring the intelligent network service. Additionally, claims 13 and 14, in part, recite that the mobile station includes a configuration routine of an intelligent network service, the routine being arranged to provide the extension layer with an input to configure the intelligent network service and as a response to the input, the mobile station is arranged to transmit configuration information to a mobile telephone network. Ali-Vehmas does not teach or discuss that the mobile station includes a configuration routine of an intelligent network service, the routine being arranged to provide the extension layer with an input to configure the intelligent network service and as a response to the input, the mobile station is arranged to transmit configuration information to a mobile telephone network as recited in claims 13 and 14. Therefore, Applicants strongly but respectfully submit that Ali-Vehmas fails to provide a basis upon which to reject claims 2, 13 and 14

With respect to dependent claims 3-12 Applicants respectfully submit that claims 3-12 depend on and incorporate all of the elements of claims 2, 13 and 14. As such, the arguments above relating to claims 2, 13 and 14 are applicable to claims 3-12. Therefore, Applicants strongly but respectfully submit Ali-Vehman does not teach the combination of elements clearly recited in each of claims 3-12.

Furthermore, it is well established in United States patent law that in order for a rejection to be proper under 35 USC § 102, each and every element of the claimed invention must be disclosed in a single reference (*Hybritech v. Monoclonal Antibodies Inc.*, 231 USPQ 81 (Fed. Cir. 1986), *In re Donohue*, 226 USPQ 619 (Fed. Cir. 1985)). It is respectfully submitted that Ali-Vehmas fails to disclose or suggest each and every element of any of claims 2-14, and in particular claims 2, 13 and 14.

X. CONCLUSION

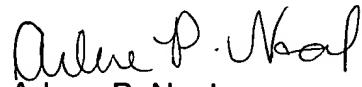
In view of the above, Applicants respectfully but strongly submit that each of presently pending claims 2-17 recite certain clear and significant distinctions which are neither disclosed nor suggested in the cited prior art. Applicant respectfully submits that these distinctions are more than sufficient to render the claimed invention unobvious to a person of ordinary skill in the art. This final rejection being in error, therefore, it is respectfully requested that this Honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case regarding the rejection of claims 2-14, and

indicate the allowability of all of pending claims 2-17.

In the event that this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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APPENDIX 1
CLAIMS ON APPEAL

1. (Cancelled)
2. A method of configuring an intelligent network service over a user interface of a mobile station by means of a management application located at an intelligent network node when the mobile station is connected to a mobile communication system which is, in turn, connected to an intelligent network, the mobile station comprising an extension layer to support installable routines; the method comprising:

loading a configuration routine of the intelligent network service in question in the mobile station;

at least one of the extension layer and the configuration routine connected to the mobile station receiving an input to configure the intelligent network service, generating configuration information on the basis of the input and transmitting the configuration information in a configuration message through a network element of the mobile communication system to said intelligent network node;

the intelligent network node interpreting the configuration information included in the configuration message and configuring the intelligent network service; and

the mobile station transmitting a configuration information inquiry before the

configuration message.

3. The method as claimed in claim 2, wherein the configuration routine is entirely installed in the mobile station before the configuration information inquiry.
4. The method as claimed in claim 2, wherein the configuration routine is installed only partly, or not at all, in the mobile station before the configuration information inquiry and the network transmits the configuration routine or at least the missing parts of the configuration routine as a response to the configuration information inquiry.
5. The method as claimed in claim 4, wherein the network transmits the configuration routine or the missing parts thereof only if requested by the mobile station.
6. The method as claimed in claim 2, wherein the network element of the mobile communication system recognizes the configuration message and transmits at least the essential part thereof to the said intelligent network node.
7. The method as claimed in claim 2, wherein the messages between the mobile station and the network element of the mobile communication system are

transparent for the portion of the network between the mobile station and the element of said mobile communication system and the network element of the mobile communication system recognizes upward and downward messages and forwards the essential parts of the messages correspondingly to the intelligent network node or the mobile station.

8. The method as claimed in claim 7, wherein the network element of the mobile communication system recognizes that the message is a configuration message on the basis of the fact that the message contains an intelligent network service identifier and preferably a special character that seldom occurs in a normal text.

9. The method as claimed in claim 7, wherein the network element of the mobile communication system recognizes that the message is a configuration message on the basis of the fact that the mobile station transmits the message to a telephone number allocated to the intelligent network service.

10. The method as claimed in claim 2, wherein in connection with changes in the intelligent network service the intelligent network node automatically transmits a notification to the mobile station.

11. The method as claimed in claim 2, wherein in connection with the changes in

the intelligent network service the intelligent network node automatically activates the loading of a new configuration routine for the mobile station.

12. The method as claimed in claim 2, wherein the messages between the mobile station and the network element of the mobile communication system are data messages, such as short messages or USSD messages.

13. A mobile station comprising an extension layer to support routines to be installed, wherein:

the mobile station comprises a configuration routine of an intelligent network service, the routine being arranged to provide the extension layer with an input to configure the intelligent network service;

as a response to the input, the mobile station is arranged to transmit configuration information to a mobile telephone network; and

the mobile station is arranged to transmit a configuration information inquiry before the configuration message.

14. An arrangement for configuring over a user interface of a mobile station an intelligent network service controlled by an intelligent network node when the mobile station comprises an extension layer to support installable routines, wherein:

the mobile station comprises a configuration routine of the intelligent network service, the routine being arranged to provide the extension layer with an input to configure the intelligent network service;

as a response to the input, the mobile station is arranged to transmit configuration information through a network element of the mobile communication system to the intelligent network node;

the intelligent network node is arranged to interpret the configuration information included in the configuration message and configure the intelligent network service on the basis of the configuration information; and

the mobile station is arranged to transmit a configuration information inquiry before the configuration message.

15. The method of claim 2, wherein the mobile station transmitting step comprises the mobile station transmitting the configuration information inquiry to said intelligent network node before transmitting the configuration message to determine which parts of a configuration routine are needed to implement requested services.

16. The mobile station of claim 13, wherein the mobile station is arranged to transmit a configuration information inquiry to said intelligent network node before transmitting the configuration message to determine which parts of a configuration

routine are needed to implement requested services.

17. The arrangement of claim 14, wherein the mobile station is arranged to transmit a configuration information inquiry to said intelligent network node before the configuration message to determine which parts of a configuration routine are needed to implement requested services.